

**WHAT IS CLAIMED IS:**

1. A grid computing system, comprising:

5 a master node configured to manage a grid comprising one or more compute nodes;

a node configured to send the master node information about compute node configuration of the node in accordance with one or more peer-to-peer platform protocols;

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wherein the master node is configured to:

determine from the information about compute node configuration that the compute node configuration of the node needs to be updated; and

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send update information for the compute node configuration to the node in accordance with the one or more peer-to-peer platform protocols.

20 2. The grid computing system as recited in claim 1, wherein the node is further configured to discover the master node in accordance with the one or more peer-to-peer platform protocols.

3. The grid computing system as recited in claim 1, wherein the node comprises a bootstrapping mechanism configured to discover the master node and to send the discovered master node the information about compute node configuration in accordance with the one or more peer-to-peer platform protocols at startup of the node.

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4. The grid computing system as recited in claim 1, wherein the node is further configured to update the compute node configuration in accordance with the update

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information.

5. The grid computing system as recited in claim 4, wherein the node is further configured to self-configure as a compute node in the grid in accordance with the updated  
5 grid configuration information.

6. The grid computing system as recited in claim 5, wherein the grid computing system further comprises a job submitter node, and wherein the master node is further configured to:

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receive a job from the job submitter node in accordance with the one or more peer-to-peer platform protocols;

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distribute the job to the node for execution in accordance with the one or more peer-to-peer platform protocols;

receive results of the execution from the node in accordance with the one or more peer-to-peer platform protocols; and

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send the results to the job submitter node in accordance with the one or more peer-to-peer platform protocols.

7. The grid computing system as recited in claim 1, wherein the grid computing system is configured according to Sun Cluster Grid architecture.

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8. The grid computing system as recited in claim 1, wherein the peer-to-peer platform protocols are JXTA protocols.

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9. A method, comprising:

5 a node on a network sending a master node information about compute node configuration of the node in accordance with one or more peer-to-peer platform protocols, wherein the master node is configured to manage a grid comprising one or more compute nodes;

the master node determining from the information about compute node configuration that the compute node configuration of the node needs to be updated; and

10 the master node sending update information for the compute node configuration to the node in accordance with the one or more peer-to-peer platform protocols.

15 10. The method as recited in claim 9, further comprising the node discovering the master node in accordance with the one or more peer-to-peer platform protocols.

11. The method as recited in claim 9, further comprising the node updating the compute node configuration in accordance with the update information.

20 12. The method as recited in claim 11, further comprising the node self-configuring as a compute node in the grid in accordance with the updated grid configuration information.

25 13. The method as recited in claim 9, wherein the grid is configured according to Sun Cluster Grid architecture.

14. The method as recited in claim 9, wherein the peer-to-peer platform protocols are JXTA protocols.

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15. A computer-accessible medium comprising program instructions, wherein the program instructions are configured to implement:

5 a node on a network sending a master node information about compute node configuration of the node in accordance with one or more peer-to-peer platform protocols, wherein the master node is configured to manage a grid comprising one or more compute nodes;

10 the master node determining from the information about compute node configuration that the compute node configuration of the node needs to be updated; and

the master node sending update information for the compute node configuration to  
15 the node in accordance with the one or more peer-to-peer platform protocols.

16. The computer-accessible medium as recited in claim 15, wherein the program instructions are further configured to implement the node discovering the master node in  
20 accordance with the one or more peer-to-peer platform protocols.

17. The computer-accessible medium as recited in claim 15, wherein the program instructions are further configured to implement the node updating the compute node configuration in accordance with the update information.

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18. The computer-accessible medium as recited in claim 17, wherein the program instructions are further configured to implement the node self-configuring as a compute node in the grid in accordance with the updated grid configuration information.

30 19. The computer-accessible medium as recited in claim 15, wherein the grid is

configured according to Sun Cluster Grid architecture.

20. The computer-accessible medium as recited in claim 15, wherein the peer-to-peer platform protocols are JXTA protocols.

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21. A system configured to participate as a compute node in a grid comprising one or more compute nodes, comprising:

10 a processor; and

a memory comprising program instructions, wherein the program instructions are executable by the processor to:

15 communicate with a node on a network in accordance with one or more peer-to-peer platform protocols to determine if compute node configuration of the system is up-to-date;

if the compute node configuration of the system is not up-to-date:

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obtain update information for the compute node configuration from the node in accordance with the one or more peer-to-peer platform protocols; and

25 update the compute node configuration of the system in accordance with the update information.

22. The system as recited in claim 21, wherein the node is a logically nearby node to the system on the network.

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23. The system as recited in claim 21, wherein the node is a master node configured to manage the grid.

24. The system as recited in claim 21, wherein the node is a compute node in the grid.

25. The system as recited in claim 21, wherein the program instructions are further executable by the processor to discover the node in accordance with one or more peer-to-peer platform protocols.

26. The system as recited in claim 25, wherein the program instructions are further executable by the processor to self-configure the system as a compute node in the grid in accordance with the updated grid configuration information.

27. The system as recited in claim 21, wherein the grid is configured according to Sun Cluster Grid architecture.

28. The system as recited in claim 21, wherein the peer-to-peer platform protocols are JXTA protocols.

29. A system, comprising:

a processor; and

a memory comprising program instructions, wherein the program instructions are executable by the processor to:

receive information about compute node configuration of a node configured to participate as a compute node in a grid in accordance with one or more peer-to-peer platform protocols;

determine from the information about compute node configuration that the  
compute node configuration of the node needs to be updated; and

5                    send update information for the compute node configuration to the node in  
                    accordance with the one or more peer-to-peer platform protocols.

30.     The system as recited in claim 29, wherein the system is a master node configured  
to manage the grid.

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31.     The system as recited in claim 29, wherein the system is configured as a compute  
node in the grid.

32.     The system as recited in claim 29, wherein the node is configured to update the  
15    compute node configuration on the node in accordance with the update information.

33.     The system as recited in claim 32, wherein the node is further configured to self-  
configure as a compute node in the grid in accordance with the updated grid configuration  
information.

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34.     The system as recited in claim 29, wherein the grid is configured according to Sun  
Cluster Grid architecture.

35.     The system as recited in claim 29, wherein the peer-to-peer platform protocols are  
25    JXTA protocols.

36.     A system configured to participate as a compute node in a grid comprising one or  
more compute nodes, comprising:

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means for determining if compute node configuration of the system needs to be updated;

means for obtaining update information for the compute node configuration; and

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means for updating the compute node configuration on the system in accordance with the update information.

10 37. A method, comprising:

a node configured to participate as a compute node in a grid comprising one or more compute nodes communicating with another node on a network in accordance with one or more peer-to-peer platform protocols to determine if compute node configuration of the node is up-to-date;

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if the compute node configuration of the node is not up-to-date:

obtaining update information for the compute node configuration from the other node in accordance with the one or more peer-to-peer platform protocols; and

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updating the compute node configuration of the node in accordance with the update information.

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38. The method as recited in claim 37, wherein the other node is a logically nearby node to the system on the network.

39. The method as recited in claim 37, wherein the other node is a master node configured to manage the grid.

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40. The method as recited in claim 37, wherein the other node is a compute node in the grid.

5 41. The method as recited in claim 37, further comprising the node discovering the other node in accordance with one or more peer-to-peer platform protocols.

42. The method as recited in claim 41, further comprising the node self-configuring as a compute node in the grid in accordance with the updated grid configuration  
10 information.

43. The method as recited in claim 37, wherein the grid is configured according to Sun Cluster Grid architecture.

15 44. The method as recited in claim 37, wherein the peer-to-peer platform protocols are JXTA protocols.

45. A computer-accessible medium comprising program instructions, wherein the  
20 program instructions are configured to implement:

a node configured to participate as a compute node in a grid comprising one or more compute nodes communicating with another node on a network in accordance with one or more peer-to-peer platform protocols to determine  
25 if compute node configuration of the node is up-to-date;

if the compute node configuration of the node is not up-to-date:

obtaining update information for the compute node configuration from the  
30 other node in accordance with the one or more peer-to-peer

platform protocols; and

updating the compute node configuration of the node in accordance with  
the update information.

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46. The computer-accessible medium as recited in claim 45, wherein the other node is  
a logically nearby node to the system on the network.

47. The computer-accessible medium as recited in claim 45, wherein the other node is  
10 a master node configured to manage the grid.

48. The computer-accessible medium as recited in claim 45, wherein the other node is  
a compute node in the grid.

15 49. The computer-accessible medium as recited in claim 45, wherein the program  
instructions are further configured to implement the node discovering the other node in  
accordance with one or more peer-to-peer platform protocols.

50. The computer-accessible medium as recited in claim 49, wherein the program  
20 instructions are further configured to implement the node self-configuring as a compute  
node in the grid in accordance with the updated grid configuration information.

51. The computer-accessible medium as recited in claim 45, wherein the grid is  
configured according to Sun Cluster Grid architecture.

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52. The computer-accessible medium as recited in claim 45, wherein the peer-to-peer  
platform protocols are JXTA protocols.